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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/964,624	09/28/2001	Yukio Hemmi	214586US3	1880
22850	7590	04/28/2004	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			PALABRICA, RICARDO J	
			ART UNIT	PAPER NUMBER
			3641	
DATE MAILED: 04/28/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center">Office Action Summary</p>	Application No. 09/964,624	Applicant(s) HEMMI ET AL.	
	Examiner Rick Palabrica	Art Unit 3641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-13 is/are pending in the application.
- 4a) Of the above claim(s) 5-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. Applicant's 2/2/04 amendment, which revises claims 1 and 2 and cancels claim 3, is acknowledged. This amendment is in response to the 10/7/03 Office Action.

Based on the deletion of claim 3 and Applicant's arguments in the Remarks section of said Amendment, the Examiner agrees that the rejection of the previous claims based 35 U.S.C. 112, 1st and 2nd paragraphs, have been overcome.

2. Applicant alleges that the amendment of claims 1 and 2, each of which now includes an additional limitation, is sufficient to overcome the applied art. The Examiner disagrees for the reasons given below.

Applicant amends claim 1 by adding the step limitation, "reducing and limiting the amount of nickel in system water supplied into the reactor to up to 1/4.4, so that a total amount of iron generated is at least twice as much as a total amount of nickel generated." Underlining provided. The claim language "up to 1/4.4" means a range extending from zero to 1/4.4. A zero value means no reduction of the amount of nickel in system water supplied into the reactor. This lowest value of the claimed range permits either non-performance or non-inclusion of the specified process step. Any one of applied art, i.e., Nagase '202, Nishino, and Nagase '269, meets the added claim limitation because each meets the lowest value of the claimed range, and therefore anticipates the entire range of zero to 1/4.4. See MPEP 2131.03, which states:

"[W]hen, as by a recitation of ranges or otherwise, a claim covers several compositions, the claim is 'anticipated' if one of them is in the prior art." *Titanium Metals Corp. v. Banner*; 778 F.2d 775, 227 USPQ 773.

Applicant alleges that none of Nagase '202, Nishino, or Nagase '269 has a teaching or suggestion of the added step limitation. The Examiner agrees. However, as stated above, absence of such step in Nagase '202, Nishino, or Nagase '269 does not preclude any one of them from meeting claim 1.

Applicant amends claim 2 by adding the step limitation, "reducing and limiting an amount of nickel generated from fuel springs up to 1/2." Again, Applicant alleges that this amended claim defines over Nagase '202, Nishino, or Nagase '269 because neither one of them teaches or suggests the added step. The Examiner disagrees for the same reason as that given above for claim 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over either one of Nagase et al. (U.S. 4,894,202) [hereinafter referred to as Nagase et al. (202)] or Nishino et al. (U.S. 4,927,598), in view of Nagase et al. (U.S. 5,398,269) [hereinafter referred to as Nagase et al. (269)].

The reasons are the same as those given in section 9 of the previous Office Action and in section 2 above.

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As to the formation of an oxide layer on the surface of the nickel base alloy material, this layer is inherently formed in the above inventions during the manufacture of the reactor components made of said material.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over either one of the Nagase et al. (202) - Nagase et al. (269) combination or Nishino et al. - Nagase et al. (269) combination, as applied to claims 1 and 2 above, and further in view of Honda et al. (U.S. 4,828,790). Either one of the Nagase et al. (202) - Nagase et al. (269) combination or the Nishino et al. - Nagase et al. (269) combination disclose the applicant's claims except for the addition of natural zinc.

The reasons are the same as those given in section 10 of the previous Office Action and in section 2 above.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rick Palabrica whose telephone number is 703-306-5756. The examiner can normally be reached on 7:00-4:30, Mon-Fri; 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 703-306-4198. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RJP
April 22, 2004



MICHAEL CARONE
SUPERVISORY PATENT EXAMINER